

# GILA RIVER BASIN

09505250 RED TANK DRAW NEAR RIMROCK, AZ

LOCATION.--Lat 34°41'43", long 111°42'49", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.16, T.15 N., R.6 E., Yavapai County, Hydrologic Unit 15060202, in Coconino National Forest, on left bank 2.5 mi downstream from confluence of Rarick and Mullican Canyons, and 3.5 mi northeast of Rimrock.

DRAINAGE AREA.--49.4 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1957 to Sept. 1978 (discontinued).

GAGE.--Water-stage recorder. Concrete control prior to Sept. 5, 1970. Altitude of gage is 3,920 ft, from topographic map. Prior to Sept. 5, 1970, at datum 0.29 ft higher.

REMARKS.--Records good except those for period of missing record, May 13 to June 13, which are poor.

AVERAGE DISCHARGE.--21 years, 7.24 ft<sup>3</sup>/s, 5,240 acre-ft/yr; median of yearly mean discharges, 4.6 ft<sup>3</sup>/s 3,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,500 ft<sup>3</sup>/s Sept. 5, 1970, recorded gage height, 12.69 ft, about 13.3 ft, from profile past gage, from rating curve extended above 1,100 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow; no flow for many days in each year.

## Annual peak discharges

Water year	Date	Annual peak discharge (ft <sup>3</sup> /s)	Discharge codes	Water year	Date	Annual peak discharge (ft <sup>3</sup> /s)	Discharge codes
1958	03-22-58	1,280		1969	01-25-69	1,650	
1959	02-17-59	113		1970	09-05-70	10,500	
1960	12-25-59	1,230		1971	10-03-70	12	
1961	03-31-61	457		1972	12-26-71	745	
1962	02-08-62	620		1973	10-19-72	2,720	
1963	03-22-63	12		1974	01-21-74	34	
1964	08-02-64	1,970		1975	04-13-75	407	
1965	04-04-65	1,440		1976	02-09-76	1,800	
1966	11-25-65	2,010		1977	04-06-77	16	
1967	12-07-66	425		1978	02-23-78	441	
1968	02-14-68	327					

## Basin characteristics

Main channel slope (ft/mi)	Stream length (mi)	Mean basin elevation (ft)	Forested area (percent)	Soil index	Mean annual precipitation (in)	Rainfall intensity, 24-hour	
						2-year (in)	50-year (in)
183	19.3	5,910	23.0	3.0	21.6	2.4	4.8

# GILA RIVER BASIN

## 09505250 RED TANK DRAW NEAR RIMROCK, AZ--Continued

MEAN MONTHLY AND ANNUAL DISCHARGES 1958-78							MAGNITUDE AND PROBABILITY OF ANNUAL LOW FLOW BASED ON PERIOD OF RECORD 1959-78						
MONTH	MAXIMUM (FT3/S)	MINIMUM (FT3/S)	MEAN (FT3/S)	STAN- DARD DEVI- TION (FT3/S)	COEFFI- CIENT OF VARI- ATION	PERCENT OF ANNUAL RUNOFF	PERIOD (CON- SECU- TIVE DAYS)	DISCHARGE, IN FT3/S, FOR INDICATED RECURRENCE INTERVAL, IN YEARS, AND NON-EXCEEDANCE PROBABILITY, IN PERCENT					
								2 50%	5 20%	10 10%	20# 5%	50# 2%	100# 1%
OCTOBER	80	0.00	4.2	17	4.1	4.9							
NOVEMBER	41	0.00	4.4	12	2.6	5.1							
DECEMBER	104	0.00	10	25	2.4	11.8	1						
JANUARY	46	0.00	7.0	13	1.9	8.0	3						
FEBRUARY	79	0.00	16	23	1.4	18.5	7						
MARCH	161	0.02	27	42	1.6	31.0	14						
APRIL	110	0.00	14	30	2.2	16.0	30						
MAY	3.7	0.00	0.25	0.82	3.3	0.3	60						
JUNE	0.05	0.00	0.01	0.01	2.7	0.0	90						
JULY	1.5	0.00	0.07	0.32	4.6	0.1	120						
AUGUST	8.8	0.00	0.50	1.9	3.9	0.6	183	0.00	0.00	0.00	0.00	0.00	0.00
SEPTEMBER	62	0.00	3.4	14	4.0	3.8							
ANNUAL	37	0.04	7.2	9.1	1.3	100							

MAGNITUDE AND PROBABILITY OF INSTANTANEOUS PEAK FLOW BASED ON PERIOD OF RECORD 1958-78							MAGNITUDE AND PROBABILITY OF ANNUAL HIGH FLOW BASED ON PERIOD OF RECORD 1958-78						
DISCHARGE, IN FT3/S, FOR INDICATED RECURRENCE INTERVAL IN YEARS, AND EXCEEDANCE PROBABILITY, IN PERCENT							PERIOD (CON- SECU- TIVE DAYS)	DISCHARGE, IN FT3/S, FOR INDICATED RECURRENCE INTERVAL, IN YEARS, AND EXCEEDANCE PROBABILITY, IN PERCENT					
2 50%	5 20%	10 10%	25 4%	50# 2%	100# 1%			2 50%	5 20%	10 10%	25# 4%	50# 2%	100# 1%
							1	208	755	1,310	2,170	2,880	3,620
							3	129	424	691	1,060	1,330	1,590
							7	75	247	400	606	755	894
							15	45	151	247	378	474	564
							30	26	96	164	267	349	430
							60	16	61	109	184	248	314
							90	12	46	82	140	189	240
724	1,860	3,090	5,410	7,810	10,900								
WEIGHTED SKEW (LOGS)= 0.18													
MEAN (LOGS)= 2.87													
STANDARD DEV. (LOGS)= 0.48													

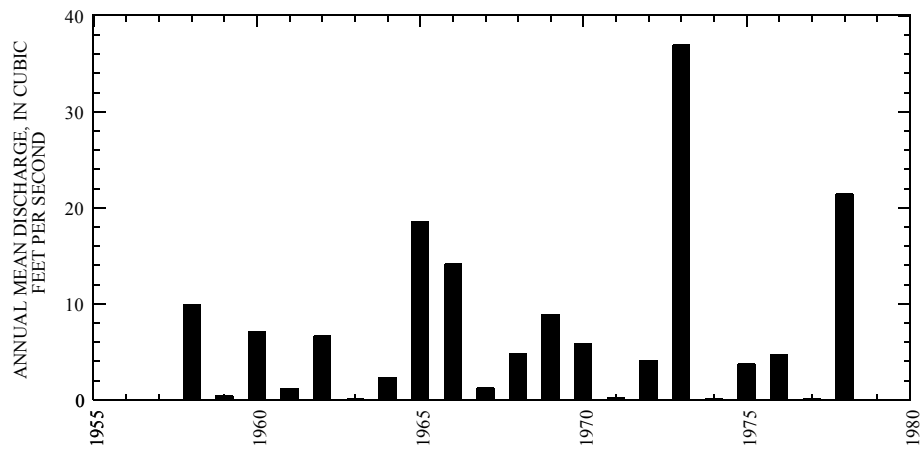
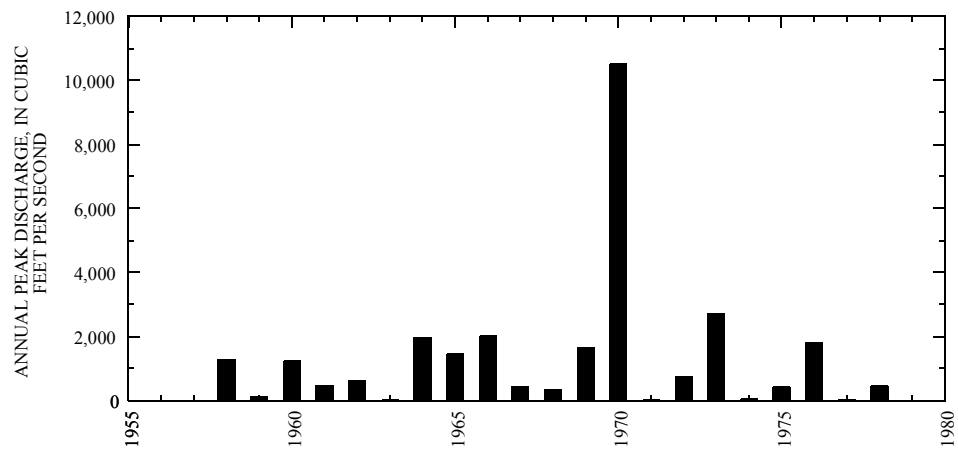
  

DURATION TABLE OF DAILY MEAN FLOW FOR PERIOD OF RECORD 1958-78																	
DISCHARGE, IN FT3/S, WHICH WAS EQUALED OR EXCEEDED FOR INDICATED PERCENT OF TIME																	
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%	
174	30	4.7	0.84	0.25	0.07	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

# Reliability of values in column is uncertain, and potential errors are large.

## GILA RIVER BASIN

09505250 RED TANK DRAW NEAR RIMROCK, AZ--Continued



# GILA RIVER BASIN

09505250 RED TANK DRAW NEAR RIMROCK, AZ--Continued

